

ABSTRACT

In accordance with the present invention, an impeller for use in a centrifugal pump has at least one vane the radially outer terminal end of which is configured to produce a flow velocity profile that controls and reduces the wear caused by slurry fluid being expelled from the impeller on the inner surface of the pump casing. The impeller vanes of the present invention are generally configured with a radially outwardly extending portion, as compared with the conventional straight or concave edge of an impeller vane. The outwardly extending portion may vary in shape, but is selected to produce a flow velocity profile that reduces wear in the pump casing.